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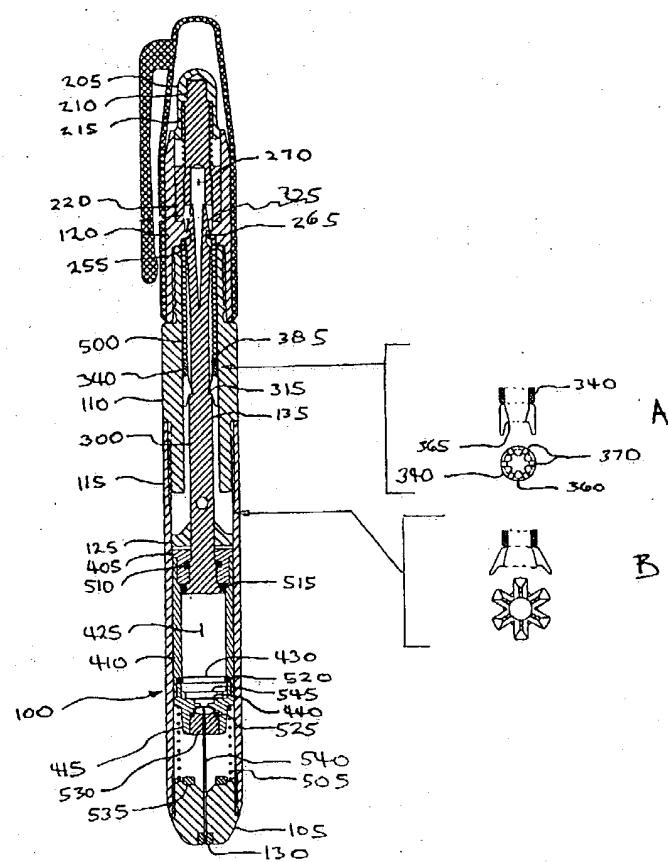
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(54) Title: AUTOMATIC MIXING AND INJECTING APPARATUS



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(57) Abstract: An automatic mixing and injecting apparatus comprises a syringe assembly (400) within a housing (100). The syringe assembly (400) has a chamber (425) for holding a liquid, which can be a liquid medicine or a solvent. A second chamber (460) may hold a dry medicine. The second chamber (460) is releasably sealed with respect to the first chamber (425). A spring-operated plunger (300) forces liquid from the first chamber (425) and causes the releasable seal (360) to disengage when the needle (540) has entered the recipient. At this time, the liquid flows through the second chamber (460) and dissolves any dry medicine in that chamber (460). A releasable coupling (340) disengages the plunger (300) from the driver spring (500) and allows the plunger (300), syringe assembly (400), and needle (540) to retract under the urging of a return spring (505).